

Q 1 - What will be the output of the following code snippet?

```
def func(a, b):  
    return b if a == 0 else func(b % a, a)  
  
print(func(30, 75))
```

- a) 10
- b) 20
- c) 15**
- d) 0

Q 2 - numbers = (4, 7, 19, 2, 89, 45, 72, 22)

```
sorted_numbers = sorted(numbers)  
  
even = lambda a: a % 2 == 0  
  
even_numbers = filter(even, sorted_numbers)  
  
print(type(even_numbers))
```

- a) Int
- b) Filter**
- c) List
- d) Tuple

Q -3 As what datatype are the *args stored, when passed into

- a) Tuple**
- b) List
- c) Dictionary
- d) none

Q -4 set1 = {14, 3, 55}

set2 = {82, 49, 62}

set3={99,22,17}

```
print(len(set1 + set2 + set3))
```

- a) 105
- b) 270
- c) 0
- d) Error

Q -5 What keyword is used in Python to raise exceptions?

- a) raise
- b) try
- c) goto
- d) except

Q -6 Which of the following modules need to be imported to handle date time computations in Python?

- a) timedata
- b) date
- c) datetime
- d) time

Q -7 What will be the output of the following code snippet?

```
print(4**3 + (7 + 5)**(1 + 1))
```

- a) 248
- b) 169
- c) 208
- d) 233

Q -8 Which of the following functions converts date to corresponding time in Python?

- a) strptime
- b) strftime
- c) both a) and b)
- d) None

Q -9 The python tuple is_____in nature.

- a) mutable
- b) immutable

c)unchangeable

d) none

Q -10 The ____ is a built-in function that returns a range object that consists series of integer numbers, which we can iterate using a for loop.

A. **range()** ✓

B. set()

C. dictionary{ }

D. None of the mentioned above

Q -11 Amongst which of the following is a function which does not have any name?

A. Del function

B. **Show function**

C. Lambda function

D. None of the mentioned above

Q -12 The module Pickle is used to ____.

A. Serializing Python object structure

B. De-serializing Python object structure

C. Both A and B

D. None of the mentioned above

Q -13 Amongst which of the following is / are the method of convert Python objects for writing data in a binary file?

A. set() method

B. **dump() method**

C. load() method

D. None of the mentioned above

Q -14 Amongst which of the following is / are the method used to unpickling data from a binary file?

A. **load()**

B. set() method

C. dump() method

D. None of the mentioned above

Q -15 A text file contains only textual information consisting of__.

A. Alphabets

B. Numbers

C. Special symbols

D. All of the mentioned above

Q -16 Which Python code could replace the ellipsis (...) below to get the following output?
(Select all that apply.)

```
captains = {
```

```
    "Enterprise": "Picard",
```

```
    "Voyager": "Janeway",
```

```
    "Defiant": "Sisko",
```

```
}
```

```
Enterprise Picard,
```

```
Voyager Janeway
```

```
Defiant Sisko
```

a) for ship, captain in captains.items():

```
    print(ship, captain)
```

b) for ship in captains:

```
    print(ship, captains[ship])
```

c) for ship in captains:

```
    print(ship, captains)
```

d) both a and b

Q -17 Which of the following lines of code will create an empty dictionary named captains?

a) captains = {dict}

b) type(captains)

c) captains.dict()

d) captains = { }

Q -18 Now you have your empty dictionary named captains. It's time to add some data! Specifically, you want to add the key-value pairs "Enterprise": "Picard", "Voyager": "Janeway", and "Defiant": "Sisko".

Which of the following code snippets will successfully add these key-value pairs to the existing captains dictionary?

a) `captains{"Enterprise" = "Picard"}`

`captains{"Voyager" = "Janeway"}`

`captains{"Defiant" = "Sisko"}`

b) `captains["Enterprise"] = "Picard"`

`captains["Voyager"] = "Janeway"`

`captains["Defiant"] = "Sisko"`

c) `captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko", }`

d) None of the above

Q -19 You're really building out the Federation Starfleet now! Here's what you have:

```
captains = {
```

```
    "Enterprise": "Picard",
```

```
    "Voyager": "Janeway",
```

```
    "Defiant": "Sisko",
```

```
    "Discovery": "unknown",
```

```
} Now, say you want to display the ship and captain names contained in the dictionary,
```

but you also want to provide some additional context. How could you do it?

a) `for item in captains.items():`

```
    print(f"The [ship] is captained by [captain].")
```

b) `for ship, captain in captains.items():`

```
    print(f"The {ship} is captained by {captain}.")
```

c) `for captain, ship in captains.items():`

```
    print(f"The {ship} is captained by {captain}.")
```

d) All are correct

Q -20 You've created a dictionary, added data, checked for the existence of keys, and iterated over it with a for loop. Now you're ready to delete a key from this dictionary:

```
captains = {  
    "Enterprise": "Picard",  
    "Voyager": "Janeway",  
    "Defiant": "Sisko",  
    "Discovery": "unknown",  
}
```

What statement will remove the entry for the key "Discovery"?

- a) `del captains`
- b) `captains.remove()`
- c) `del captains["Discovery"]`
- d) `captains["Discovery"].pop()`